**Review: Cell Cycle & DNA**

**Name:**

**Biology 12**

1. State and explain two reasons why cells divide instead of continually grow.

Watch the video called “DNA Structure” linked [HERE](https://www.youtube.com/watch?v=C1CRrtkWwu0) or on the class notebook page to help answer the questions below.

1. What does DNA stand for and what is its purpose (function)?
2. Where is DNA found within an eukaryotic cell?
3. Who are the 4 scientists credited with discovering the structure of DNA?
4. Using the DNA model activity baggie and instructions create the small section of DNA stated on the instruction sheet. When you have constructed your model draw a diagram of the section of your DNA. Make sure to label the following on your diagram: phosphate, ribose (sugar), adenine, guanine, thymine, cytosine and hydrogen bonds. Circle an example of a nucleotide and label it as such.
5. Why is DNA called a “double helix” strand?
6. Define the following terms: chromosome, chromatin, centromere, homologous chromosomes, gene, trait
7. What is the relationship between DNA, chromosomes, genes and traits? Use the diagram to assist you in explaining.

Diagram

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